

OBITUARY

RECENT DEATHS

DR. WILLIAM FRANCIS MAGIE, Joseph Henry professor of physics at Princeton University from 1890 until his retirement with the title emeritus in 1929, dean of the faculty from 1912 to 1925, died on June 5. He was eighty-four years old.

DR. CHARLES F. MARVIN, who retired in 1934 after serving as chief of the United States Weather Bureau for twenty-one years, died on June 5 at the age of eighty-four years.

WESLEY P. FLINT, chief entomologist of the Illinois State Natural History Survey and of the College of Agriculture of the University of Illinois, died on June 3 at the age of sixty-one years.

DR. MARION A. AMES, professor of chemistry and chairman of the Division of Natural Sciences at Elmira College, died on June 4. She was forty-four years old.

EDWIN M. BAKER, professor of chemical engineering at the University of Michigan, died on May 26 at the age of fifty years.

MILNOR R. FREELAND, since 1930 resident chemist at the Presbyterian Hospital of Chicago, died on May 4 at the age of forty-two years.

DR. JOHN W. RITCHIE, science editor of the World Book Company, formerly professor of biology at Maryville (Tenn.) College and the College of William and Mary, Williamsburg, Va., died on May 29 at the age of seventy-one years.

The Cleveland Clinic Quarterly dedicated its April issue to the memory of the late Dr. George Crile, a

founder and former president of the Cleveland Clinic Foundation, and prints the addresses that were presented at the memorial service for Dr. Crile at Western Reserve University on January 24.

THE Council of the American Mathematical Society has adopted the following resolution on the death of Professor E. R. Hedrick: "The Council of the American Mathematical Society records its deep sense of loss in the death on February 3, 1943, of Earle Raymond Hedrick. As an active member of the society during four decades of its unprecedented growth and development, he made contributions which were great in number and varied in character. He gave abundantly of his time, thought and energy to the society and served it in the official capacities of council member, trustee, vice-president, president and editor-in-chief of the *Bulletin*. Through membership on many important committees both within the society and outside of it, he labored unceasingly toward the advancement of the interests and prestige of mathematics at all levels. His activities in the Mathematical Association of America, the National Council of Teachers of Mathematics and in numerous engineering and other scientific societies were extensive and outstanding to a degree hard to comprehend in view of his heavy involvement in society and other responsibilities. Professor Hedrick had a rare combination of broad interests, outstanding skill at logical and thorough analysis, good judgment and ability to work effectively with other people. These characteristics invariably singled him out and placed him in a position of leadership."

SCIENTIFIC EVENTS

AVALANCHE RESEARCH IN SWITZERLAND¹

DURING the War of 1914-18 the number of avalanche fatalities among the armies in alpine regions was very high; in the period between the two wars, the influx of winter visitors to the Alps was followed by an alarming increase in accidents due to inexperience in snow-craft. It became obvious that a proper study of snow and avalanches was needed. There followed the private research work of individuals in many parts of Central Europe, who in turn were succeeded by more elaborately organized groups. In 1934 the Swiss authorities inaugurated a small research laboratory on the Weissfluhjoch close to the upper end of one of the Davos funiculars at a height of 8,500 feet. Under the direction of Dr. H. Bader, a crystallographer, and Dr. M. Haefeli, a civil engi-

neer, much valuable work was carried out ranging from the purely scientific to the severely practical. The former has given us a great deal of new knowledge of the structure and behavior of ice crystals, such as their rearrangement into regular order under stress with its clearly defined metallurgical analogy. Among the latter were such tests as the reaction of different types of snow to varying meteorological conditions and the resulting tendency to increase or decrease avalanche danger. The drawing together of the many threads of research followed and the results, combined with the investigations of practical men in the mountains, have been of the greatest value in bringing about a closer understanding of, and so mitigating, avalanche dangers. An excellent publication of some 340 pages was produced in 1939 recounting the field and laboratory work up to the end of 1938, and subsequent publications have also appeared.

¹ From *Nature*.